# YANLIANG HAN

# **LANGUAGES AND TECHNOLOGIES**

- SQL; C++, C, Java and C#; ASP.NET, PHP, Python, HTML5, CSS3, JavaScript, XML; Matlab; OCaml; Smalltalk.
- MVC, Eclipse, VS; Stored Procedure, Indexing, MySQL, SQL Server; GitHub, SVN and TFS; Linux, Mac OS; OpenCV, Scalable Web, Information System, Responsive UI design, Image processing, Computer Vision, Security.

### **EMPLOYMENT**

### **Graduate Assistant**

# Database and Information Systems Laboratory in Univ. of Illinois

- Refactor and speed up (by 70%) rendering data list performance from MySQL to .NET website.
- Improved security by encrypting sensitive communications and hashing User passwords.
- Integrated TextCube, TopicCube modules into the NASA eventCube Data Mining system.

# **Software Development Engineer Intern**

Microsoft Corp.

Sep 2011 - Dec 2011

Jan 2012 - May 2012

Global Information System for international banking.

- Design the XML schema and implement the Semi-automatic Batch Import, Audit and Publish modules with it.
- Implement the Advanced Search and Statistic Management Modules with Optimized Stored Procedure and Indexing.
- Speed up testing by coordinating 4 teammates executing Web Performance, Load Testing and Performance Analysis.

## **Research Assistant**

# **Guangdong Key Laboratory of Information Security**

Dec 2009 - Aug 2010

- Implement the MIT Kerberos authentication protocol from sketch/TCP.
- Implement Shamir Visual Secret Sharing across Windows Phone and PC platforms.
- Lead my team and win the 3rd Prize in National Information Security Contest among over 500 top competitors.

# Research Assistant Media Lab

May 2010 - July 2010

• Implement Feature detection, Segmentation and Numerical Recognition (SVM) for paper money.

#### **EDUCATION**

# Champaign, IL

University of Illinois at Urbana-Champaign (UIUC)

Spring 2012 - Fall 2013

Last-year GPA: 3.445

## M.C.S. in Computer Science

• Advanced Coursework: Advanced Data Mining; Computer Vision; Applied Cryptography; Object Oriented Programming and Design; Independent Study.

• Graduate Coursework: Text Information Systems; Database Systems; Programming Languages and Compilers; UI Design.

### Guangzhou, P.R.C.

Sun Yat-sen University (SYSU)

Fall 2007 - Spring 2011

In-Major GPA: 3.43

### **B.E. in Software Engineering**

• Selected Coursework: Algorithms; Computer Vision; Unified Communication; Software Engineering; Numerical Method; Operating Systems; Database System Principle; Information Security; Linux Analyze and Application.

### **PROJECTS**

- Open Source Algorithms Demonstration (2013): Dynamic Programming, Bit Manipulation, Sorting, String process. Unordered-map/ Hash Table, Unordered Set, Linked list, Vector, Binary Search Tree and backtracking.
- Algorithms Fantasy Template Library (AFTL) for C++ & JAVA (2013): Randomized-Quicksort 190% efficient than the mature Merge-sort; Binary search tree; Rotated array Stack, Queue, Heap and Vector/ ArrayList.
- Panorama Stitching, 3D Reconstruction and Affine Factorization (2013). Matlab-implement Computer Vision project with 4.0 GPA. RANSAC and Homography Transform.
- Illini Tutor Search (2012). Selected demo in class with full credit. Web application with extensive database design.
- Object Oriented Tic-tac-toe (2013). Implement Ultimate Tic-tac-toe with Artificial Intelligence.
- Simulation System for Grasslands Ecosystems (2009). Architecture design and JAVA implementation.

#### **AWARDS**

- 2008-2010 Twice awarded 3<sup>rd</sup>-Prize Scholarship for Academic Excellence by SYSU
- 2009-2010 3<sup>rd</sup> Prize in National Information Security Contest issued by The Ministry of Education
- 2009-2010 3<sup>rd</sup> Prize in ACM Programming Contest held by SYSU
- 2009-2010 3<sup>rd</sup> Prize in Mobile Terminal Software Innovation Contest